

What is claimed is:

1. A method for making a composite article, the method comprising the steps of:
providing a polymerizable monomer or resin;
providing a microfibrillated article;
contacting the microfibrillated article with the monomer; and
polymerizing the monomer(s) or resin into the matrix polymer.
2. A method for making a composite article as in claim 1, wherein the microfibers of the microfibrillated article have a surface area of at least about 3 square meter per gram.
3. A method for making a composite article as in claim 1, wherein the microfibers have a draw ratio of 10:1.
4. A method for making a composite article as in claim 1, wherein the microfibers have a tensile strength of at least about 275MPa.
5. A method for making a composite article as in claim 1, wherein the microfibers have a surface coating thereon.
6. A method for making a composite article as in claim 5, wherein the surface coating includes a coupling agent.
7. A method for making a composite article as in claim 1, wherein the microfibers have a surface treatment thereon.
8. A method for making a composite article as in claim 1, wherein the microfibers are formed of polypropylene.
9. A method for making a composite article as in claim 1, wherein the monomer is selected from the group of phenolic resins, epoxy resins, vinyl ether resins, vinyl ester resins, urethane resins, cashew nut shell resins, naphthalinic phenolic resins, epoxy

modified phenolic resins, silicone resins, polyimide resins, urea formaldehyde resins, methylene dianiline resins, methyl pyrrolidinone resins, acrylate and methacrylate resins, isocyanate resins, unsaturated polyester resins, and mixtures thereof.

10. A method for making a composite article as in claim 1, wherein the microfibrillated article comprises a non-woven web of entangled microfibers.

11. A method for making a composite article as in claim 1, wherein the microfibrillated article further comprises engineering fibers.

12. The method of claim 11 wherein said engineering fibers are selected from the group consisting of E-glass, S-glass, boron, ceramic, carbon, graphite, aramid, polybenzoxazole, ultrahigh molecular weight polyethylene (UHMWPE), and liquid crystalline thermotropic fibers.

13. A method for making a composite article as in claim 1, wherein the monomer is a precursor to a thermoset polymer.

14. A method for making a composite article as in claim 1, wherein the monomer is a precursor to an elastomeric polymer.

15. A method for making a composite article comprising the step of laminating at least one microfiber layer to at least one polymer matrix layer.

16. The method of claim 15 wherein said polymer layer is a thermoplastic polymer layer.

17. The method of claim 16 wherein said microfiber layer further comprises engineering fibers.

18. A method for making a composite article, the method comprising the steps of: providing a thermoplastic polymer;

providing a microfibrillated article;

contacting the microfibrillated article with the thermoplastic polymer with heat and/or pressure.

19. The method of 18 wherein the thermoplastic polymer is injection molded.

20. The method of 18 wherein the microfibrillated article is extrusion coated with thermoplastic polymer.

21. The method of 18 wherein the microfibrillated article and thermoplastic polymer are laminated together.